

CHARLES RIVER WATERSHED STUDY
RECREATION INTERIM MEMO # 6
PROPOSED BIKEWAY SYSTEMS FOR
LOWER BASIN AND MUDDY RIVER

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1. Introductory. The areas considered for bikeways are the Lower Basin of the Charles River, downstream from Galen Street to Charles River dam; and the Muddy River from Jamaica Pond to Charlesgate. The former area was studied during the recreational investigation of the Charles River study about two years ago; while the latter was the subject of a field study at the request of the Boston Redevelopment Authority. It is considered useful to combine both bikeway systems suggested in one publication.

It is important when planning bikeways to provide, wherever possible, paths where no other pedestrian or less than automotive traffic is active. However there are portions around the Lower Basin and Muddy River where such separation is not possible due to narrowness of the public land. In such areas pedestrian traffic can be separated by marked sidewalks with separate lanes for cyclists.

a. Most Popular Outdoor Activity. In terms of pure participation, more people ride bicycles in the United States than engage in any other outdoor activity. The Bicycle Institute of America has estimated that approximately 80,000,000 people ride bicycles. The annual United States production of bicycles is in excess of six million units.

b. National Health a Goal of Importance. Paul Dudley White, M.D. is an international authority on heart disease. He is also an active cyclist who has encouraged the use of bicycles as an aid to health. Some of the benefits attributed to bicycling by Dr. White are "... an aid to good muscle tone, much needed by the American people today... aids circulation and

thereby the heart by keeping the blood actively moving in the legs; aids the lungs.. the brain, the nerves and finally longevity, since it may in the long run help to reduce high blood pressure, coronary thrombosis and diabetes."

Dr. White is president of the Committee for Safe Bicycling in Boston.

c. Federal Policy. "Trails for America", a publication of the National Park Service of the Interior Department, states that: " The Federal Government should...(6) Encourage and assist local agencies in obtaining financial assistance in acquiring necessary land and in developing trails. Money is available from BOR; HUD Open Space and Beautification programs; Urban Renewal Administration for Urban Planning Assistance; and the Highway Beautification Act of 1965 by the Bureau of Public Roads.... Trails located in or near metropolitan areas and adapted to the use of hikers, horseback riders and cyclists are among the best means of accomodating urban recreation-alists."

d. State and Local Responsibilities. (Trails for America) "The States should 1) Give consideration in their comprehensive outdoor recreation plans for trail development that will help meet urban needs"... "Local agencies should: 1) Assume the major responsibility within metropolitan areas for acquisition, planning, development and maintenance of trail systems; 2) Pursue an aggressive program of trail development on city and county lands." Since the Lower Basin is entirely surrounded by park lands under the Metropolitan District Parks Division, this is the responsible regional agency, although six cities and towns border on the Lower Charles Basin. The Muddy River parks are under the jurisdiction of the Boston Parks Department, the Brookline Parks Department and the Metropolitan District Commission has responsibility for the parkways therein.

e. What Has Been Done in Other Cities and Criteria. Chicago maintains 50 miles of bikeways, including 17 miles along Lake Michigan used by an estimated 10,000 cyclists per day. Milwaukee, Wisconsin provides 130 miles of bikeways including a 64 mile circuit around the city. Seattle, Washington has proposed a system capable of accomodating 120,000 cyclists. Criteria on the basis of miles of trails per thousands population range from the ORRRC formula of 25 miles for each 50,000 persons down to 10 miles per 50,000 in Detroit.

2. Features of Areas Proposed for Bikeways. Both the Lower Basin and the Muddy River areas were included in the open spaces master plan devised in the 1890's by Frederick Low Olmsted, who was also the planner of Central Park in New York City, the World's Fair, and Leland Stanford University, Palo Alto, California. The continuity of these systems running from the Public Garden west on Commonwealth Avenue to Charlesgate, and southward to the Fens, Riverway, Jamaicaway, Jamaica Pond, Arborway to Franklin Park; and around the lower Basin from the dam on both banks up to Galen Street- this land ownership assured in the past continuous bicycle trails and paths without serious interruptions. Since that time many changes have occurred to break this continuity. These include highways, cloverleafs, bridges, and the narrowing of the parkland fringes. To restore continuity safety will be stressed, and economy also. To simply bridge all the interruptions by pedestrian overpasses in the Lower Basin area alone would cost, at today's values, probably four to five million dollars. Therefore, bridges will be recommended only when no alternate safe method of crossing seems practical. Well marked pavements, efficient push-button pedestrian lights at the crossings, and adequate signing will be utilized elsewhere.

3. Cooperating Agencies. The resources of the Lower Basin for paths include nearly 18 miles of motor-traffic free sidewalks along the river banks. Continuous trails for walking, bicycling and sightseeing have been strongly recommended by the Metropolitan Area Planning Council, the Boston Redevelopment Authority, Dr. White's Committee for Safe Bicycling, the Metropolitan District Commission and others. It is the purpose of the Corps of Engineers to present the proposed bikeways as described here as a part of its Charles River Watershed Study in the hope it will be of material assistance to the planning efforts of the other agencies involved.

4. Local Demands are Heavy. The presence of a great number of educational institutions in the areas near the Lower Charles and Muddy Rivers exerts strong pressure for bicycle facilities. Students at Harvard, Radcliffe, M.I.T., Boston University and Northeastern, to mention a few of the larger institutions, number many thousands, many of whom depend on bicycles for local transportation. The bicycle traffic near the Fens, Huntington Avenue, along Memorial Drive and Harvard Square is often heavy, at most times of the year.

5. BOSTON BEHIND OTHER U.S. CITIES.

Boston is not geared for bicyclists. Where other cities have recognized bicycles as a transportation resource, Boston has done nothing. There are no established bikeways marked by signs. Motorists in the metropolitan area of Boston are not accustomed to watching out for cyclists. Bicycles are not permitted to cross the Mystic Bridge to East Boston or to use the tunnels, so that it is impossible to bicycle from downtown Boston to East Boston. There are no parking facilities for bikes at MBTA or highway or bus stop areas. There is no Youth Hostel in Boston. Many foreign cycling groups are brought into the United States by national bicycling organizations. In many cities

there are hostels where these visitors can stay and transportation for their bikes is available. San Francisco permits cyclists to use the Golden Gate Bridge now and there are bike trails in that city. The use of bicycles for commuting into the core city of Boston from the suburbs has been tried by enough people to determine that it is indeed a swift and efficient method of commuting in clement weather. Boston enjoys many natural advantages for bicycling. Examples are the public park land surrounding the entire Lower Charles River Basin; the linear green strip from the Public Garden via Commonwealth Avenue to Charlesgate and thence along park lands of the Muddy River to Jamaica Pond. The original park lands extended from the pond through the Arborway to Franklin Park. In spite of man-made interruptions in these park systems, there are good opportunities for bikeway systems. Back Bay abounds in quaint narrow alleys, remnants of the days when horses and coaches were stabled in the rear of houses. These ways are seldom used by automobiles and constitute another resource for bikeways worth exploring.

6. Bikeways Should be Planned Now. With all the programs of urban redevelopment, highways and other public works now underway or under planning, the time to plan for bikeways is now, before these other plans are too far advanced. Specific examples will illustrate the urgency of planning in advance. The Charles River Dam project at Warren Avenue recommended by the Corps of Engineers will result in changes to the river banks in this area. The City of Boston is in the process of acquiring land between the existing dam and the prospective dam. This will certainly be useful for recreational activities, including paths. The Inner Belt, if authorized, will involve changes on both banks of the Charles River in the vicinity of Magazine Beach and the

B. U. Bridge. The Inner Belt will also affect the area near the Fenway. Proposed plans for improvement of the Jamaica way should also take into consideration the needs of pedestrians and cyclists along the Muddy River Park lands. It will be too late to build in the needed facilities after the roads have been built.

7. Bicycles Can Help Reduce Air Pollution. With current concern for air pollution caused by automobile exhausts (which accounts for a high percentage of air pollution), the use of bicycles by many people for commuting reasonable distances from home to job, or from home to bus station or MBTA station, can materially reduce noxious emissions attributable to automobile use.

8. Credits. This interim memo owes greatly to many agencies and persons. The material has been reviewed by the Boston Parks Department, the Boston Redevelopment Authority and members of Dr. White's Committee for Safe Bicycling. This is not a definitive plan, although its outlines are based on conditions which exist today and may be considered fairly stable, mainly because there are few alternatives under existing conditions. It is hoped that the appropriate public agencies will implement a program of bicycle ways around the Lower Basin and Muddy River which will restore as much as possible the continuity of these park lands.

9. SUGGESTED TYPE OF SIGN AND STREET CROSSING.



BICYCLE PATH



10. Charles River Lower Basin Bikeway System, text and map.

SECTION NORTH BANK: GALEN STREET - ELIOT BRIDGE

Charles E. Greenough Boulevard runs to North Beacon St. bridge, is interrupted by the Arsenal land and continues down to Eliot St. from Arsenal St. This is MDC land. Safe pavement crossings and push-button lights are needed at North Beacon Street, and probably at Arsenal Street, although underpasses are now under construction at the latter location.

SECTION NORTH BANK: ELIOT BRIDGE - WESTERN AVE. BRIDGE

This is all MDC land. Existing underpasses afford access to other side of Eliot Bridge. Safe pavement crossing zones, and lights needed at Anderson and at Western Avenue Bridges.

SECTION NORTH BANK: WESTERN AVE. - MUSEUM OF SCIENCE.

Safe crossing areas and lights needed at Cambridge Street and the Cottage Farm Bridge, although this latter area should be re-studied after the work on the sewage facilities has been finished. Safe crossing zones and lights needed at Harvard Bridge, and connection between east end of Memorial Drive and Charles Bank Yacht Club.

MUSEUM OF SCIENCE - COTTAGE FARM BRIDGE, EAST AND SOUTH BANKS: This area contains the most substantial strip of park lands in the Embankment Road area and Storrow Embankment. No automobiles are allowed, and there are already excellent facilities for cyclists in the many paths and sidewalks. Harvard Bridge at Massachusetts Avenue includes a wide underpass over the existing sidewalk.

COTTAGE FARM (B.U.) BRIDGE - ELIOT BRIDGE, SOUTH BANK: From B.U. Bridge as far as Cambridge Street there is little space for walking or bicycling. The removal of a few feet of the railroad bridge abutment; installation of a guard rail along Soldiers' Field Road up to Cambridge Street Bridge, and the widening of this bikeway area are all needed. At Cambridge St. Bridge and at Western Avenue Bridge, safe pavement crossing facilities and push button lights are needed. The presence of Weekes Memorial Pedestrian Bridge allows cyclists to cross the Charles and return to Eliot St. bridge via the North Bank. At present there is not enough space on the south bank for a bikeway.

ELIOT ST. BRIDGE -NORTH BEACON ST. BRIDGE: SOUTH BANK:

The only useable section now lies through the Soldiers'Field Road area as far as Arsenal Street. No crossings needed in this stretch.

NORTH BEACON ST. BRIDGE - GALEN ST. SOUTH BANK: Careful planning will be needed at Arsenal St., where construction is underway. No south bikeway recommended at present, except between No. Beacon St. and Newton Yacht Club.

11. Muddy River Bikeways System, including text and map.

SUGGESTIONS FOR A BIKEWAY ALONG THE MUDDY RIVER
IN BOSTON AND BROOKLINE, MASS. (Revised 21 Jan. 1970)

On 23 July 1969 a reconnaissance by bicycle was carried out. The areas covered were from Jamaica Pond to Storrow Embankment. This route includes that portion of the Muddy River specifically under planning by the Boston Redevelopment Authority's Fenway Project, but is also related to proposed bikeways around the Lower Charles River Basin. Accompanying sketch maps indicate the highlights of the field reconnaissance.

The Muddy River area contains many delightful sections, but from Jamaica Pond to Charles River Embankment a series of formidable man-made interruptions break the erstwhile continuity of this linear park as envisaged by Olmsted. These take the form of streets, highway cloverleaves, high bridges and overpasses, the Massachusetts Turnpike and Penn-Central Railroad tracks. However, if the cyclist can surmount these obstacles, it will be well worth his while once he reaches the Charles River Embankment, where there is a river bank area, free from automobiles, from which there is a choice of attractive rides in an outstanding setting. Views of Cambridge, Beacon Hill and the old houses of Back Bay against the backdrop of the skyscrapers of the New Boston roll by. Sidewalks are numerous and wide. Trees provide shade and in summer there is coolness from the river.

JAMAICA POND - HUNTINGTON AVE.

Jamaica Pond is completely circled by a wide smooth sidewalk near the shore. This is now a fine path for cyclists with easy grades and an attractive landscape. On the east side of this sidewalk a wide fork leads right and ends at Perkins Street and Jamaicaway. From this point to Huntington Avenue the line between Boston and Brookline runs in the Middle of the Muddy River. (This boundary continues along the Muddy River all the way to the end of the Riverway at Sears Roebuck.) After crossing Perkins Street a dirt path skirts the Jamaicaway and is halted at the MDC Skating Rink where curbs and roads force the cyclist to dismount and walk beyond to the continuation of the path. A detour around the rink complex for walkers and cyclists should be provided. The path continues towards Huntington Avenue, but a fork to a bridge over the Muddy River is recommended. When the bicycle trip was made in July, a dump was in existence near the bridge. During a field reconnaissance on 20 January, the dump was gone and the whole area restored. In winter this is suitable for sledding and coasting. The Boston Park Department is to be commended for the present attractive appearance of what was formerly a hideous eyesore. On the Brookline side wide sidewalks make for easy cycling. The planting here is attractive and everything appeared to be in good condition. The best crossing appeared to be west of the Jamaicaway Bridge over Huntington Avenue.

HUNTINGTON AVE. - FRANCIS/NETHERLAND 'STS.

On the Brookline side, Huntington Ave. and Brookline Ave. come to the point of a triangle. From this point Brookline Ave. extends into Boston. There are wide sidewalks on both sides.

FRANCIS ST. - SEARS ROEBUCK

This area is known as The Riverway. Sketch 3 shows the section as far as the Longwood Ave. bridge. This crosses the river and its park lands on both sides with a high arch, so that there are no interruptions to the continuity of the paths on both sides. At the time of the reconnaissance the Brookline side of the Riverway provided the best route, since the sidewalk was very wide and hardtopped. The paths on the Boston side were cinder or dirt, although useable.

RIVERWAY - FENWAY AT LOUIS PASTEUR AVE.

Present Inner Belt plans call for the new highway to go underground in the Sears Roebuck area. At present this whole complex of roads is a major obstacle to pedestrians and cyclists with little space along the roads for either. Brookline Ave. is another obstacle. Beyond, the Fenway runs along the west bank of the Muddy River and Park Drive along the east side. Between is a park strip bordered by wide paths which would be very suitable for bicycle and walking use with minor improvements.

BACK BAY FENS - AGASSIZ ROAD

A wide sidewalk runs on the westerly side of the Fens with entrances to three bridges over the Muddy River and paths which cross this area and end at Park Drive. The Fens abounds in paths and sidewalks and is very suitable for cyclists. The presence of thousands of Northeastern students in this neighborhood accounts for the heavy bicycle traffic which exists.

BACK BAY FENS - AGASSIZ ROAD - COMMONWEALTH AVE.

In this section are the colorful Fens gardens on the west and an excellent paved sidewalk. The paths on the east are mostly cinder. A children's playground near the highway complex at Boylston Street is a

pleasant and well separated area from the traffic, although easily accessible to the Fens by good paths. The Fens ends at Boylston Street on the east and Park Drive on the west.

BACK BAY FENS - STORROW EMBANKMENT

From here to the Embankment a series of man-made obstacles present the walker or cyclist with formidable opposition. However these are not as formidable as they appear at first glance. By establishing safe crossing areas at Boylston Street, existing sidewalks along the bridge crossing the Penn Central tracks and the Massachusetts Turnpike may be used. These continue down a ramp to Charlesgate East, a street which crosses Commonwealth Avenue. A safe crossing zone across Charlesgate East is recommended. From the southwest corner of Commonwealth Ave. and the latter street, the cyclist now faces street level crossings as follows: two over Commonwealth; one over Marlborough St. and one over Beacon Street. Quick-acting and long-lasting pedestrian lights should be installed, if not already in use at all these points. After crossing Beacon Street, a sidewalk leads a short distance along Charlesgate East which, with part of the road entering the downtown entrance ramp to Storrow Drive, and a fork to the right leading into Back Street, which is a one-way (eastbound) road extending all the way to the Arlington-Beacon Street intersection. Back Street is a private road used by residents and delivery trucks etc. The distance to Massachusetts Avenue is very short and this section of Back Street is the best method at present of reaching Massachusetts Avenue. The Massachusetts Avenue, or Harvard Bridge crosses Storrow Drive's two lanes, before spanning the Charles River. Safe crossing zones with lights would provide easy access via the existing sidewalk to a point where a ramp for cyclists could be constructed. This would lead directly to existing paths on Storrow Embankment.



